DOCUMENT RESUME

ED 430 697 PS 027 634

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TITLE Autonomy, Parenting, Parental Involvement in Schooling and School Achievement: Perception of Quebec Adolescents.
PUB DATE 1999-04-00
NOTE 21p.; Paper presented at the Annual Conference of the American Educational Research Association (Montreal, Quebec, Canada, April 19-23, 1999).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; Adolescent Attitudes; *Adolescents; Foreign Countries; *Grades (Scholastic); High Schools; *Parent Child Relationship; *Parent Participation; Parent School Relationship; Parent Student Relationship; *Personal Autonomy; Predictor Variables; Public Schools; *Student Attitudes; Student Motivation
IDENTIFIERS Parenting Styles; Quebec; Work Orientation

ABSTRACT

This study examined differences in adolescents' levels of autonomy as a function of parenting and parental involvement practices and the adolescents' year-end grade point averages. Participating were 872 adolescents, with a mean age of 14.45 years, attending 5 French-speaking public high schools in Quebec, Canada. Measures were subjects' general year-end grade point averages, the Student Report of Autonomy, the Student Report of Parenting Style, and the Student Report of Parent Involvement. The findings indicated that adolescents' autonomy and more specifically, work orientation followed by self-reliance and identity, individually contributed to the prediction of school grades. The three parenting style dimensions (warmth, supervision, and psychological autonomy granting) and one parental involvement dimension (affective support) showed a positive relationship with work orientation. Parent-adolescent interactions on daily school matters were negatively related to autonomy and work orientation. Parental warmth had a direct relation, through autonomy and two of its dimensions, on school grades, work orientation, and self-reliance, whereas psychological autonomy granting and affective support had both a direct and an indirect effect. Supervision was found to partially mediate the link between work orientation and school grades. Findings lend support to the importance of considering autonomy and at least two of its dimensions, work orientation and self-reliance, in the study of parenting and parental involvement practices in relation to school grades. (Contains 27 references.) (Author/KB)

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ED 430 697

Autonomy, Parenting, Parental Involvement in Schooling and School Achievement : Perception of Quebec Adolescents

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Roundtable presentation at the **1999 AERA** annual meeting program of the **Families as Educators SIG** April 1999, Montreal

ABSTRACT

The following study asks questions addressing differences in adolescents' levels of autonomy in function of parenting and parental involvement practices and year-end averages. Using data from 872 adolescents living in Quebec, it was found that: (a) adolescents' autonomy and more specifically, work orientation followed by self-reliance and identity, individually contributed to the prediction of school grades; (b) the three parenting style dimensions, warmth, supervision and psychological autonomy granting and one parental involvement dimension, affective support, showed a positive relationship with work orientation; parent-adolescent interactions on daily school matters were negatively related to autonomy and work orientation; (c) parental warmth had a direct relation through autonomy and two of its dimensions on school grades, work orientation and self-reliance; whereas psychological autonomy granting, and affective support had both a direct and an indirect effect. Supervision was found to partially mediate the link between work orientation and school grades. Results lend support to the importance of considering autonomy and at least two of its dimensions, work orientation and self-reliance in the study of parenting and parental involvement practices in relation to school grades.

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INTRODUCTION

Studies have shown that adolescents who have achieved high levels of autonomy perform better in school than their peers do (e.g., Greenberger, 1982, 1984; Steinberg, Elmen, & Mounts, 1989). Other research has indicated that parenting style and parental involvement in schooling practices are associated with adolescents' school achievement (e.g., Deslandes, 1996, Dornbusch et al., 1987; Herman, Dornbusch, Herron, & Herting, 1997; Lee, 1994, Linver & Silverberg, 1997; Paulson, 1994; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Steinberg and colleagues (1989) have found that the relation between parenting style practices and school achievement was mediated by adolescents' level of autonomy. In one-year follow-up study, Steinberg et al. (1994) observed drops in work orientation, one autonomy construct, among adolescents of neglectful parents (i.e., low engagement and low supervision) (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). Still unanswered are questions concerning whether autonomy develops differently when parents are involved in their adolescents' schooling. To our knowledge, in previous studies, no attempt was made to assess influences of specific parent involvement in schooling practices on adolescents' level of autonomy in relation to school achievement. Moreover, no other study in the province of Quebec, has yet investigated the links between adolescents' autonomy and school achievement. None has considered the interplay that parenting style and parental involvement may have with autonomy in achievement.

OBJECTIVES

This study was designed to answer three questions : (a) Is the adolescents' level of autonomy significant predictor of school achievement? (b) What is the relationship between parenting style and parental involvement in schooling practices and the adolescents' level of autonomy? (c) Does autonomy mediate between parenting style and parental involvement in schooling practices and school achievement? The major goal of the study was to expand understanding of the mechanisms through which parenting and parental involvement practices may be associated with school achievement at the secondary level.

CONCEPTUAL FRAMEWORK

Autonomy or the capacity to function effectively (individual adequacy) is part of the concept of psychosocial maturity, along with interpersonal adequacy and social adequacy (Greenberger & Sorensen, 1974). On the basis of the work of Greenberger (e.g., Greenberger, 1982, 1984; Greenberger, Josselson, Knerr, & Knerr, 1975; Greenberger & Sorensen, 1974), autonomy is conceptualized along three dimensions: self-reliance, work orientation and identity (see also Deslandes, Potvin & Leclerc, 1999).

Parenting style refers to a general child-rearing pattern that characterizes parents' behaviors toward their child (Steinberg et al., 1992). Parenting style is characterized by three dimensions, previously identified by Steinberg, Elmen and Mounts (1989): parental warmth, supervision and psychological autonomy granting. In prior studies, the three dimensions were found to be positively related to school achievement (Steinberg et al., 1989; Deslandes, 1996; Deslandes, Royer, Turcotte, & Bertrand, 1997; Herman, Dornbusch, Herron, & Herting, 1997; Linver & Silverberg, 1997).

Parental involvement in schooling refers to the parents' role in their child's education at home and at school (Christenson, Rounds, & Franklin, 1992). In previous analyses, a parent involvement five-subscale measure was developed through exploratory factor analysis from a scale first designed by Epstein, Connors and Salinas (1993) (Deslandes, Bertrand, Royer & Turcotte, 1995; Deslandes, 1996; Deslandes et al., 1997). Findings from a recent study supported the five-dimension construct validity through confirmatory factor analyses (Deslandes, Potvin & Leclerc, in preparation). The five dimensions include: affective support, communication with the teachers, parent-adolescent day-to-day interactions on school matters, parent-school and parent-adolescent communication. Past research, using the same measures, indicated positive links between affective support and school grades (Deslandes, 1996), and a positive relationship between parent-adolescent day-to-day interactions on school matters and disciplinary referrals at school (Deslandes & Royer, 1997). Negative links were observed between communication with the teachers and school grades (Deslandes et al., 1997). Obviously, parent involvement rises when students are perceived to be doing poorly either academically or behaviorally, suggesting the presence of a deficit model (Cochran, 1987; Cochran, & Dean, 1991).

METHOD

Participants

The sample was composed of 872 girls (n = 468, 53.7%) and boys (n = 404, 46.3%) with an average age of 14.45 years. They came from the first wave of a 3-year longitudinal study. They were attending five French-speaking public high schools in urban, suburban and rural areas of the Mauricie Bois-Francs and Monteregie regions in the province of Quebec. Nearly one third (28.8%) of the participants were from single-parent household or stepfamilies, while 70% lived with their biological parents. Thirty-four percent of the mothers and 32% of the fathers had attended either a college or university.

Measures

Dependent variable: Indicator of achievement

General year-end point averages were obtained from the official school records.

Independent variables

Student Report of Autonomy (Greenberger, Josselson, Knerr, & Knerr, 1974). A translated and adapted version of the three 10-item subscales of the autonomy scale of the Psychosocial Maturity Inventory (Form D) was used (for more information on the transcultural validation, see Deslandes, Potvin & Leclerc, 1999). The scoring was based on a Likert scale, ranging from 1 (never) to 4 (very often). The work-orientation subscale measures the adolescent's work skills, aspirations for competent work performance, and capacity to experience pleasure in work. The internal reliability of this subscale in the present study was quite good (Cronbach's alpha was .85). A sample item from this subscale, reverse scored, is " I tend to go from one thing to another before finishing any one of them ". The self-reliance subscale assesses the absence of dependence on others, a sense of control, and self-initiative. A sample item, reverse code, is " The main reason I'm not more successful is that I have bad luck from this ". The internal reliability of this subscale was acceptable (Cronbach's alpha was .71). The identity subscale measures the adolescent's sense of self-esteem, concern with life goals, internatlization of values, and clarity of self-concept. A sample item, reverse scored, is "I can't really say what my interests are ". The internal reliability of this subscale was good (Cronbach's alpha was .83). The three

subscales, self-reliance, work orientation and independence, were shown to have good reliability and validity.

Student Report of Parenting Style (Steinberg et al., 1992). This measure is a translated and adapted version of the three subscales developed by Steinberg et al. (1992): warmth, supervision and psychological autonomy granting and used in previous studies (e.g., Deslandes, 1996; Deslandes, Bertrand, Royer & Turcotte, 1995; Deslandes et al., 1997). The three dimensions were recently assessed through confirmatory factorial analyses (Deslandes, Potvin & Leclerc, in preparation). The first subscale, entitled warmth, measures the extent to which the adolescent perceives his or her parents as loving, responsive, and involved (sample item: "I can count on my parents to help me out, if I have some kind of problem," 10 items; alpha= 86). The second subscale, called supervision, assesses parental monitoring of the adolescent (sample item: "Your parents really know what you do with your free time," 6 items; alpha=..80). The third subscale, labeled psychological autonomy granting, measures the extent to which parents employ democratic discipline and encourage the adolescent to express individuality with the family (sample item, reverse score: "My parents answer my arguments by saying something like 'You'll know better when you grow up,' " 8 items; alpha=.80).

Student Report of Parent Involvement (Epstein, Connors & Salinas, 1993, Q-3). A five-dimension scale was adapted from questionnaires designed by Epstein et al. (1993) and then, assessed through confirmatory factorial analyses (Deslandes, Potvin & Leclerc, in preparation). The resulting subscales, which include twenty parental involvement activities, at home and at school, are labeled as follows: (a) affective support (sample item: "My mother gives me encouragement about school," 6 items, α= 0.82); (b) communication with the teachers (sample item: "My mother talks with my teachers on the phone," 4 items, α= 0.73); (c) parent-adolescent interactions based on daily school matters (sample item: "My mother asks if I did my homework," 4 items, α= 0.80); (d) parent-school communication (sample item: "A parent goes to a meeting for parents at the school," 3 items, α= 0.59); and (e) parent-adolescent communication (sample item: "My mother discusses with me about my future (work, studies)," 3 items, α = 0.65). Adolescents' perceptions of mothers' and fathers' involvement were measured, and then, averaged in order to obtain global parental scores.

Procedures

Active informed consents were first obtained from about 70% of the adolescents' parents. Because of our fear to introduce important biases related to levels of parental involvement in schooling and levels of adolescents' autonomy, we requested an authorization from La Commission d'accès à l'information de la province de Québec. We were thus allowed to conduct our study without having to go through official parental consent. However, we had the school principals' and the participating teachers' approvals. An agreement on the three-year study was signed through the university lawyer between the school and the university administrators. In return, we committed ourselves to the presentation of the results to the participating schools, so that each partner could gain benefits from the research.

The questionnaires were administered in April and May, 1998 and the year-end point averages were collected from official school records during the month of July, 1998. Data were based on the youth self-reports. Steinberg and his colleagues (1994) present a strong argument for the use of students' report of parents' behaviors instead of parents' reports of their own behaviors. In fact, they claim that what counts is the way that students subjectively experience their parents. When comparing adolescents' reports of their parents' behavior with parents' reports and objective assessments of family life, Schwartz, Barton-Henry and Pruzinsky (1985) noted that adolescents' reports of their parents' behavior were more accurate.

RESULTS

Partial correlations were computed, after controlling for maternal and paternal education and family structure. The three dimensions of autonomy were significantly interrelated, with correlation coefficients that varied from .34 to .48, indicating their separate contributions to the global score of autonomy. Yet, they were strongly correlated to the global score of autonomy (r = .74 to r = .79), indicating their mutual contribution to the single factor.

To address the first two questions, data were analyzed using hierarchical regression analyses. Regarding the third question, the procedure testing a mediational model suggested by Judd and Baron (1981) was followed. The three-step procedure include: (a) significant relations between the predictors and the outcome; (b) significant relations between the mediator and the outcome; and (c) nonsignificant relations between the predictors and the outcome when the mediator is controlled. Thus, there is perfect mediation if the relation between the predictors and

the outcome is nonsignificant when the mediator is controlled. The mediation is partial when the direct effects of the predictors on the outcome are reduced (for more details, see Baron & Kenny, 1986). In the current study, as recommended by Baron and Kenny (1986), only the predictors that were significantly related to each mediator were included in the individual regression equations.

Question 1. In the first set of analyses, adolescents' grades were regressed separately on autonomy and on each of its three dimensions (work orientation, self-reliance and identity) controlling for family structure and father's and mother's levels of schooling. The results indicated a positive relation between adolescents' level of autonomy and school grades (β=.283, p<.001). More specifically, work orientation (β=.315, p<.001) made the most significant contribution to the prediction of school grades. It was followed by self-reliance (β=.176, p<.001) and then, identity (β=.141, p<.001) (see Figure 1). However, when the three dimensions were entered simultaneously as group, identity was not significantly related to school grades.

Question 2. To determine the association between autonomy and parenting style, the three dimensions of parenting style were entered simultaneously (entered as a group) after controlling for maternal and paternal education and family structure. Two dimensions, warmth (β=.353, p<.001), and psychological autonomy granting (β=.256, p<.001) showed a statistically significant relation to autonomy. More specifically, warmth (β=.192, p<.001), psychological autonomy granting (β=.179, p<.001), and supervision (β=.123, p<.001), predicted work orientation, whereas warmth and psychological autonomy granting predicted independence (warmth: β=.234, p<.001; psychological autonomy granting: β=.261, p<.001), and identity (warmth: β=.400, p<.001; psychological autonomy granting: β=.171, p<.001) (see figure 2).

With regard to parental involvement in schooling dimensions (entered as a group), affective support (β=.359, p<.001) and parent-adolescent communication (β=.095, p<.05) were positively related to autonomy. Parent-adolescent interactions based on daily school matters (β=-.122, p<.01) showed a negative relation to autonomy. Affective support positively predicted work orientation (β=.293, p<.001), but parent-adolescent day-to-day interactions on school matters was inversely related to work orientation (β=-.134, p<.01). Affective support also positively predicted self-reliance (β=.197, p<.001) and identity (β=.325, p<.001). A positive relationship

was found between identity and parent-adolescent communication (β=.100, p<.05), and a positive one was observed between parent-adolescent interactions based on daily school matters and identity (see Figure 3).

Question 3. Results for the mediating function of autonomy and its dimensions are presented in Table 1. Only the beta weights obtained in the first and the third steps of the analyses on the variables that met the Judd and Baron (1981) mediating conditions are reported.

With respect to parenting, when controlling for autonomy, we observed an indirect relation of warmth with school grades through the levels of autonomy, work orientation and self-reliance. In other words, in the presence of autonomy and two of its dimensions, the relation of warmth and school grades dropped to nonsignificance. Psychological autonomy granting was found to be both directly and indirectly associated with grades through its relation with autonomy, work orientation, self-reliance and identity. Both direct and indirect links were also found between supervision and grades through the relation with work orientation.

Similarly, for parental involvement in schooling, both direct and indirect effects were shown in the relation between affective support, autonomy, and its three dimensions, and school grades. Likewise, parent-adolescent interactions based on daily school matters had both a direct effect and an indirect effect on school grades via autonomy and work orientation. Autonomy and identity were also found to mediate the links between parent-adolescent communication and school grades, but in a very marginal way. No other variables satisfied the mediating conditions suggested by Judd and Baron (1981).

DISCUSSION AND CONCLUSION

Results indicate that adolescents who perform well in school are more likely to describe themselves as having a high level of autonomy, and more precisely, as being persistent and committed to their work (work orientation), as being self-confident (self-reliance), and as having a high self-esteem (identity). In other words, when considered individually, autonomy and its three dimensions are positively associated with adolescents' school grades. But as Steinberg et al. (1989) had found, having a high self-esteem was not directly related to school grades when the three dimensions of parenting were entered in the equation as a group.

Adolescents, across various family structures and parental education levels, who feel that their parents are warm (i.e., loving and responsive) and highly autonomy supportive (i.e., who

encourage their individuality within the family and who employ democratic discipline), describe themselves as being more autonomous. They report a high esteem of themselves (identity), a sense of control (self-reliance) and a high commitment to their work (work orientation). Furthermore, adolescents who perceive their parents as monitoring their whereabouts consider themselves as being also more persistent in their work (work orientation). In brief, the three dimensions of parenting style, warmth, psychological autonomy granting and supervision contribute to the prediction of work orientation, the autonomy dimension that is most importantly associated with school grades. Two of the parenting style dimensions, warmth and psychological autonomy granting are correlated significantly and positively with autonomy and its two other dimensions, self-reliance and identity.

Concerning parental involvement in schooling dimensions, results indicate positive contributions of affective support to autonomy, identity, work orientation and self-reliance, and of parent-adolescent communication to autonomy and identity. In other words, adolescents whose parents are involved in their schooling through affective support (encouragement, praise, help with homework when asked, discussions on courses to choose and attendance at school as audience) are more autonomous, independent, emotionally mature and work-oriented. Moreover, adolescents whose parents take time to discuss on time management, career planning or about current events are also more autonomous and emotionally mature. However, parents seem to react to low levels of autonomy and to low commitment to work by interacting more often with their adolescents on daily matters (e.g., questions about school, grades, and homework).

Finally, findings from the mediating analyses suggest that parental warmth contributes to school grades through its impact on autonomy and its two dimensions, work orientation and self-reliance. Parental warmth appears to be uniquely indirectly associated with school grades through its relations with autonomy, work orientation, and self-reliance. Nevertheless, it should be noted that the magnitudes of the correlations between parental warmth, school grades, and adolescents' autonomy are generally small.

Both direct and indirect effects are noted with the other parental dimensions. Parental supervision is positively related to school grades partly because it contributes to the development of autonomy, and more specifically, of work orientation, which in turn, facilitates school grades. In the same vein, psychological autonomy granting and affective support in schooling show both

direct and indirect associations with school grades. These two parental dimensions also predict school grades in part because they foster the levels of autonomy and work orientation, and at a lesser degree, levels of self-reliance and identity. Interestingly, parent-adolescent interactions based on daily school matters may serve to low levels of autonomy and work orientation, and consequently, reduce the response to low grades. In contrast, parent-adolescent communication is reflected in a higher level of autonomy, but when it occurs, it is more importantly in reaction to low school grades.

The clearest pattern to emerge from these analyses is the consistent relation between work orientation, school grades and parental warmth, supervision, psychological autonomy granting, and affective support. This latter finding is partially in accordance with Steinberg et al. (1989)'s previous study which demonstrated that parenting practices contribute to school grades indirectly through their impact on work orientation. It also supports the Linver and Sliverberg (1997) findings. Those scholars have demonstrated that warmth, supervision and psychological autonomy granting are associated significantly with both adolescent school grades and adolescent autonomy. However, the current results are at variance with Steinberg et al.'s (1989) results in that, self-reliance, which is also related to school grades, is directely related to the parenting practices studied.

EDUCATIONAL IMPORTANCE OF THE STUDY

Despite a number of limitations of this study, the data provide further support for the importance of autonomy, and more importantly, of work orientation, and self-reliance as intervention targets in promoting school achievement. Schools, through their comprehensive family-school-community partnerships programs, should include practices that focus on promoting parents' support for autonomy to their adolescents. According to our findings, when adolescents' autonomy is the goal, such programs based on Epstein's framework (1995) of major types of parental involvement should tap on type 1 (parenting skills), type 3 (volunteering and presence as audiences at school and type 4 (learning at home) practices of partnership. Type 1 activities aim to increase parents' understanding of their adolescents as students and of the importance of specific parenting practices in relation to school achievement. For example, this could include workshops on adolescent development and on ways to express affection and supervision. Type 3 activities enable families to give their time to support schools, teachers, and

adolescents. For example, the presence of the parents at school as audiences communicates that parents care for their adolescents and their education. This particular type of activities was included in the affective support dimension of the current study. Type 4 activities provide information to parents about how to help their adolescents with homework and other curriculum-related activities. These activities increase family discussions about school work which were referred in the current study through the parental affective support dimension (Epstein, Coates, Salinas, Sanders & Simon, 1997).

Further investigations should include longitudinal studies to determine how differences in autonomy and in particular, work orientation and self-reliance, modulate the nature of partnerships practices required to foster school achievement. To what extent do various levels of autonomy lead to changes in parenting behaviors? Other questions remain. How do at-risk students (e.g., special education students) differ in terms of their work skills, aspirations for competent work performance and capacity to experience pleasure in work (work orientation)? Is their need for guidance and parental involvement any different than that for regular students? Obviously, we must not disregard the role of the teachers and educators in the adolescents' development of autonomy and more specifically, of their motivation to work hard and to strive for success. Future research should include school components in examining autonomy development at the high school level.

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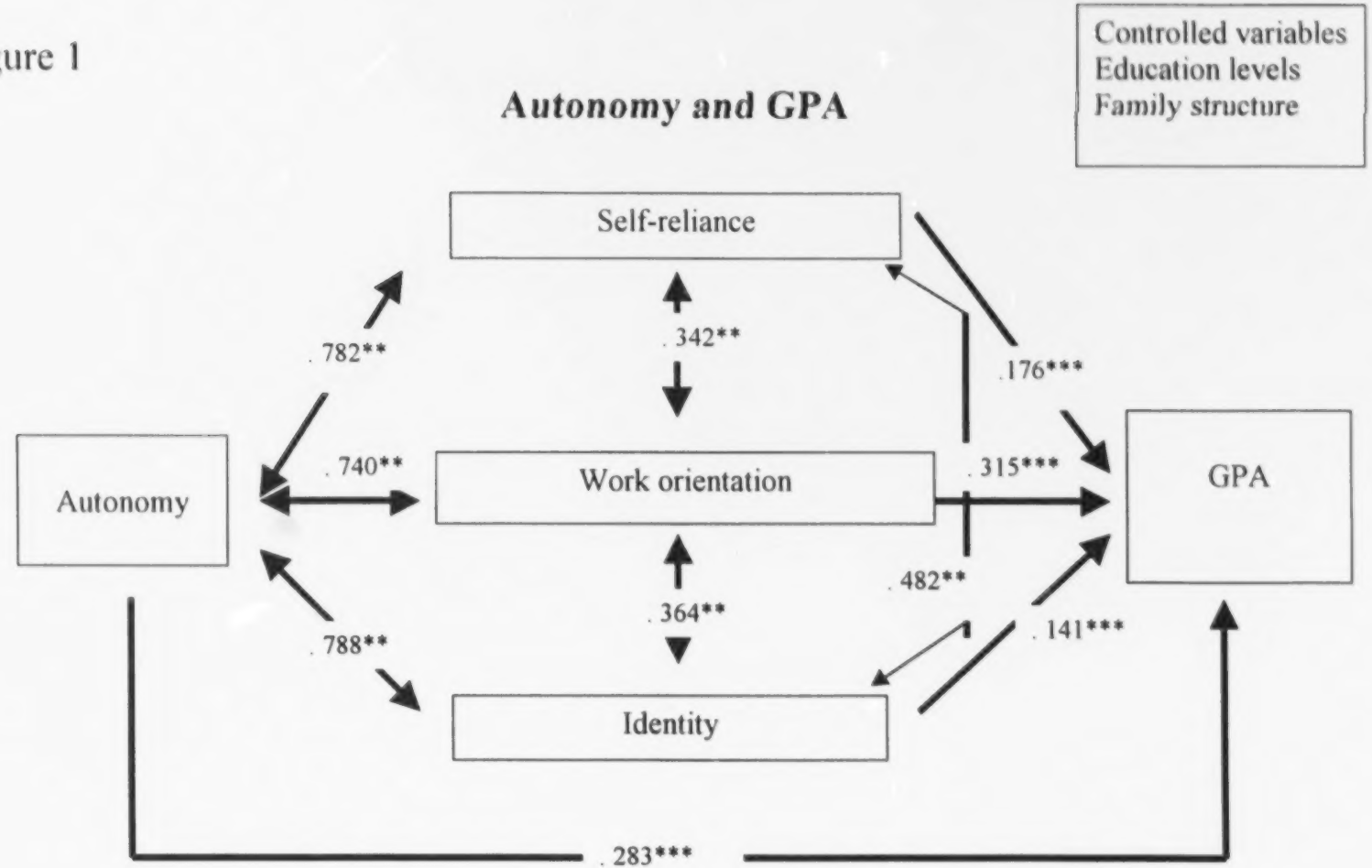
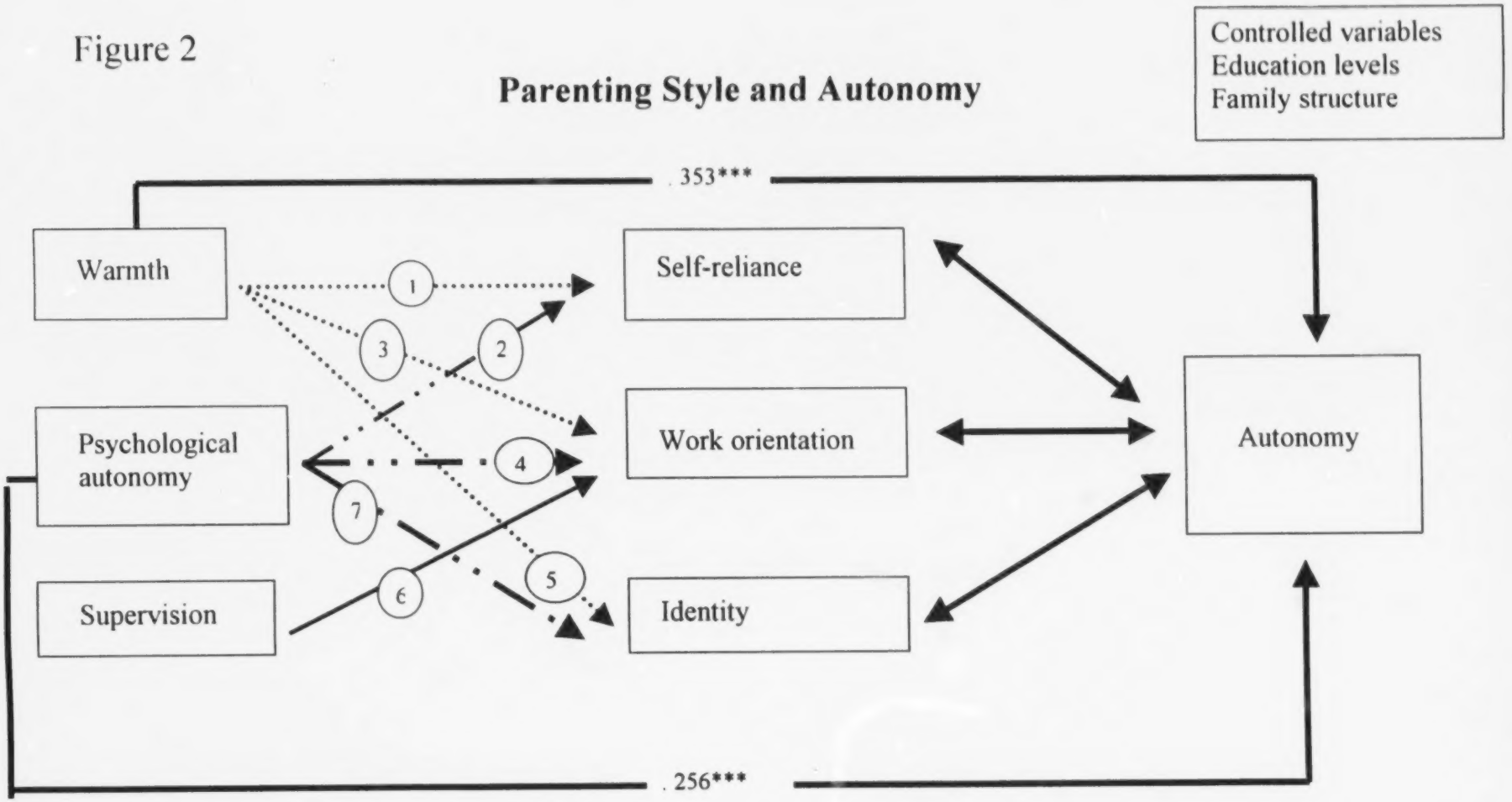
Figure 1



** p < . 01 ; *** p < . 001

Figure 2

Parenting Style and Autonomy

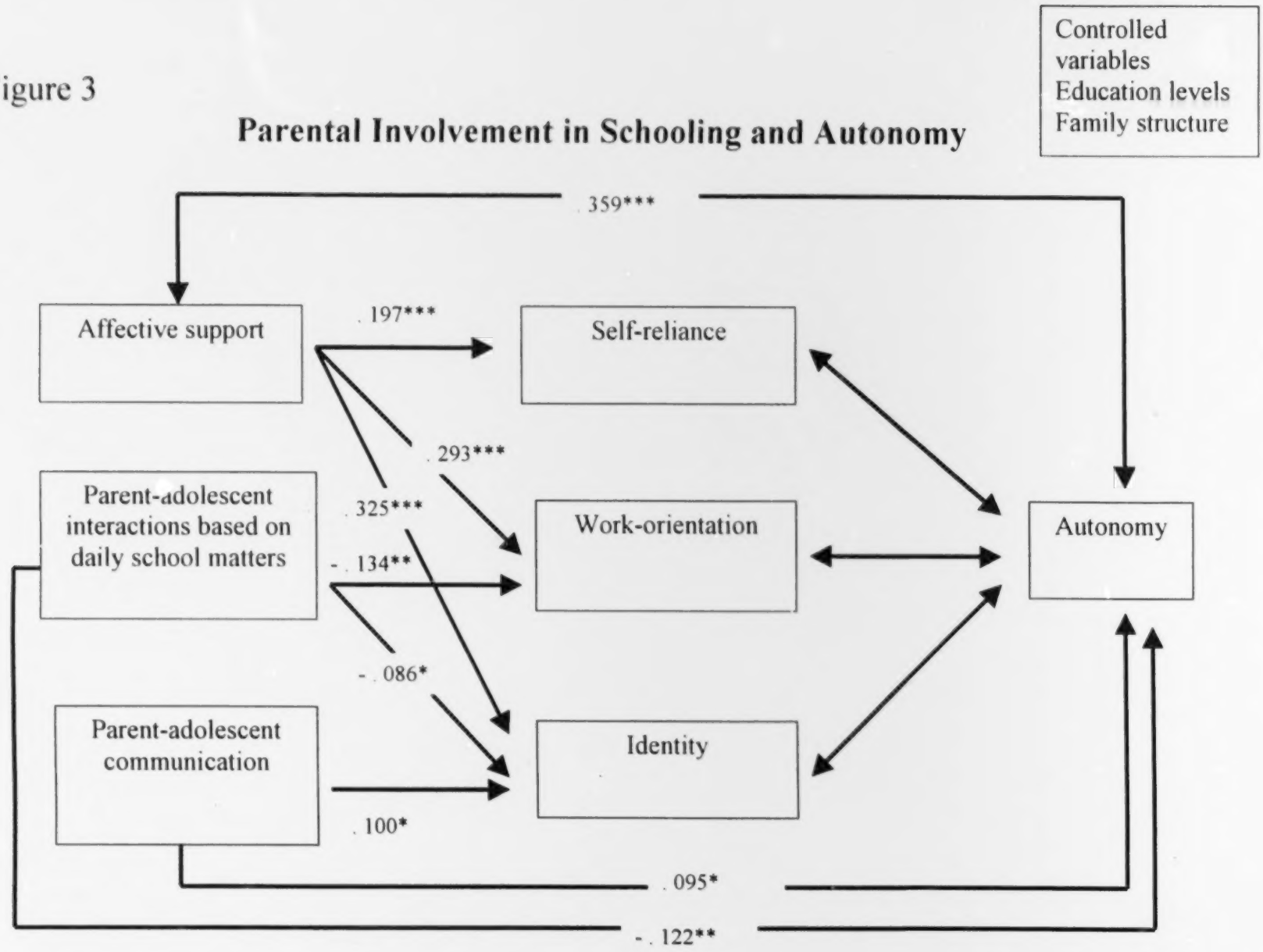


** p < .01 ; ***p < .001

① .234***
② .261***
③ .192***
④ .179***
⑤ .400***
⑥ .123***
⑦ .171***

Figure 3

Parental Involvement in Schooling and Autonomy



* p < . 05 ; ** p < . 01 ; *** p < . 001

Table 1

Standardized Regression Coefficients for Parenting Style and Parental Involvement Dimensions, and Mediating Measures Predicting Year-End Averages, Controlling for Maternal and Paternal Education Level and Family Structure

	Autonomy		Work orientation		Self-reliance		Identity	
	Coefficients Beta (β)							
	1st step	3rd step	1st step	3rd step	1st step	3rd step	1st step	3rd step
Parenting style								
Warmth	.12**	.03ns	.07*	.02ns	.12**	.04ns	.12**	.09**
Supervision			.16***	.12***				
Psychological autonomy granting	.14***	.08*	.14***	.11**	.14***	.12**	.14***	.12**
Parent involvement in schooling								
Affective support	.47***	.39***	.39***	.31***	.25***	.22***	.47***	.45***
Interactions based on daily school matters	-.22***	-.19***	-.26***	-.23***			-.22***	-.21***
Parent-adolescent Communication	-.16***	-18***					-.16***	-.17***

*** p <,001; ** p <,01**; p <,05